

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~In a controllee electronic apparatus, a method of operation~~
A method comprising:

providing to a remote control, by a controllee electronic apparatus, with a first collection of user interface displays having associated control commands, for the remote control to controlling the controllee electronic apparatus;

receiving by the controllee electronic apparatus, first control commands, from said remote control, the first control commands being resulteding from said provided first collection of user interface displays being used by a user of said remote control;
and

controlling operation of said controllee electronic apparatus, by said controllee electronic apparatus, in accordance with said received first control commands.

2. (Currently Amended) The method of claim 1, wherein said providing to a remote control, by a controllee electronic apparatus, with a first collection of user interface displays for controlling the controllee electronic apparatus comprises providing to the remote control, by said controllee electronic apparatus, with a first collection of user interface displays having a plurality of display states and associated display state transition rules.

3. (Currently Amended) The method of claim 1, wherein said providing to a remote control, by a controllee electronic apparatus, with a first collection of user interface displays for controlling the controllee electronic apparatus comprises providing to the remote control, by the controllee electronic apparatus, with a first collection of user interface displays having a plurality of display cells.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) The method of claim 1, wherein said first control commands comprise control commands for controlling a plurality of operation characteristics of said controllee electronic apparatus, and said plurality of operation characteristics ~~comprise~~ are selected from a group consisting of power on/off, channel selections, audio volume, picture brightness, and picture color.

10. (Currently Amended) The method of claim 1, wherein said method further comprises providing to said remote control, by the controllee electronic apparatus, ~~with~~ a second collection of user interface displays for controlling an auxiliary controllee electronic device coupled to said controllee electronic apparatus.

11. (Currently Amended) The method of claim 10, wherein said providing to the remote control, by the controllee electronic apparatus, ~~with~~ a second collection of user interface displays for controlling the auxiliary controllee electronic device, comprises providing to the remote control, by the controllee electronic apparatus, ~~with~~ a second collection of user interface displays having a plurality of display states and associated display state transition rules.

12. (Currently Amended) The method of claim 10, wherein said providing to the remote control, by the controllee electronic apparatus, ~~with~~ a second collection of user interface displays for controlling the auxiliary controllee electronic device, comprises providing to the remote control, by the controllee apparatus, ~~with~~ a second collection of user interface displays having a plurality of display cells.

13. (Cancelled) ~~with withone~~

14. (Currently Amended) The method of claim 10, wherein said method further comprises

receiving by the controllee electronic apparatus, from said auxiliary controllee electronic device, specifications of ~~the~~ substantive contents of said second collection of user interface displays; and

generating by the controllee electronic apparatus, said second collection of user interface displays, in accordance with said received specifications.

15. (Currently Amended) The method of claim 14, wherein said receiving of specifications of ~~the~~ substantive contents of said second collection of user interface displays, by said controllee electronic apparatus, comprises receiving by the controllee electronic apparatus, from said auxiliary controllee electronic device, an XML based specification.

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) The method of claim 10, wherein said method further comprises

receiving by the controllee electronic apparatus, second control commands, from said remote control, the second control commands being resulteding from said ~~provided~~ second collection of user interface displays being used by asaid user of said remote control; and

controlling operation of said auxiliary controllee electronic device, by said controllee electronic apparatus, in accordance with said received second control commands.

19. (Cancelled)

20. (Currently Amended) The method of claim 18, wherein said controlling of the operation of the auxiliary controllee electronic device, by the controllee electronic apparatus, comprises relaying by the controllee electronic apparatus, the received second commands, to the auxiliary controllee electronic device.

21. (Cancelled)

22. (Cancelled)

23. (Currently Amended) The method of claim 20~~2~~, wherein said second control commands comprise control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics ~~comprise~~ are selected from a group consisting of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) ~~In a auxiliary controllee electronic device coupled to a primary controllee electronic device, a~~ A method of operation comprising:

providing to a primary controllee electronic device, by an auxiliary controllee electronic device, specifications for a collection of user interface displays having associated control commands for controlling the auxiliary controllee electronic device, ~~to the primary controllee electronic device for the primary controllee electronic device to generate and provide the collection of user interface displays to a remote control~~ having associated control commands to a remote control;

receiving by the auxiliary controllee electronic device, control commands, originated from said remote control, the control commands being resulted from said

~~provided~~ collection of user interface displays having associated control commands being used by a user of said remote control; and

controlling operation of said auxiliary controllee electronic device, by said auxiliary controllee electronic device, in accordance with said received control commands.

27. (Currently Amended) The method of claim 26, wherein said providing to a primary controllee electronic device, by an auxiliary controllee electronic device, of specifications for a collection of user interface displays having associated control commands for controlling the auxiliary controllee electronic device, comprises providing to the primary controllee electronic device, by the auxiliary controllee electronic device, specifications for a collection of user interface displays having a plurality of display states and associated display state transition rules.

28. (Currently Amended) The method of claim 26, wherein said providing to a primary controllee electronic device, by an auxiliary controllee electronic device, of specifications for a collection of user interface displays having associated control commands, for controlling the auxiliary controllee electronic device, comprises providing specifications for a collection of user interface displays having a plurality of display cells.

29. (Currently Amended) The method of claim 26, wherein said providing to a primary controllee electronic device, by an auxiliary controllee electronic device, of specifications for a collection of user interface displays having associated control commands for controlling the auxiliary controllee electronic device, comprises providing to the primary controllee electronic device, by the auxiliary controllee electronic device, an XML based specification, specifying the substantive contents of the collection of user interface displays.

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Currently Amended) The method of claim 34, wherein said control commands comprise control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics ~~comprise~~ are selected a group consisting of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

36. (Cancelled)

37. (Cancelled)

38. (Currently Amended) ~~In a remote control, a~~ A method of operation comprising: receiving by a remote control, from a primary controllee electronic device, a first collection of user interface displays having associated control commands for controlling ~~a the~~ the primary controllee electronic device;

facilitating usage of the first collection of user interface displays by a user, by the remote control, to control the primary controllee electronic device; and

providing first control commands to the primary controllee electronic device, by the remote control, to control the primary controllee electronic device, in response to said usage of the first collection of user interface displays.

39. (Currently Amended) The method of claim 38, wherein said receiving of a first collection of user interface displays having associated control commands for controlling the primary controllee electronic device, by the remote control, comprises receiving by the remote control, from the primary controllee electronic device, a first collection of

user interface displays having a plurality of display states and associated display state transition rules.

40. (Currently Amended) The method of claim 38, wherein said receiving of a first collection of user interface displays having associated control commands for controlling the primary controllee electronic device, by the remote control, from the primary controllee electronic device, comprises receiving by the remote control, from the primary controllee electronic device, a first collection of user interface displays having a plurality of display cells.

41. (Cancelled)

42. (Cancelled)

43. (Currently Amended) The method of claim 38, wherein said first control commands comprise control commands for controlling a plurality of operation characteristics of said primary controllee electronic device, and said plurality of operation characteristics ~~comprise~~ are selected ones the group consisting of power on/off, channel selections, audio volume, picture brightness, and picture color.

44. (Currently Amended) The method of claim 38, wherein the method further comprises

receiving by the remote control, a second collection of user interface displays having associated control commands, from the primary controllee electronic device, for controlling an auxiliary controllee electronic device coupled to the primary controllee electronic device;

facilitating usage of the second collection of user interface displays by a user, by the remote control, to remotely control the auxiliary controllee electronic device; and

providing second control commands either directly or indirectly to the auxiliary controllee electronic device, by the remote control, to control the auxiliary controllee

electronic device, in response to said usage of the second collection of user interface displays.

45. (Currently Amended) The method of claim 44, wherein said ~~providing~~receiving ~~by the remote control, from a primary controllee electronic device,~~ of a second collection of user interface displays for controlling the auxiliary controllee electronic device, comprises ~~providing~~receiving by the remote control, from the primary controllee electronic device, a second collection of user interface displays having a plurality of display states and associated display state transition rules.

46. (Currently Amended) The method of claim 44, wherein said ~~providing~~receiving ~~by the remote control, from a primary controllee electronic device,~~ of a second collection of user interface displays for controlling the auxiliary controllee electronic device, comprises ~~providing~~receiving by the remote control, from the primary controllee electronic device, a second collection of user interface displays having a plurality of display cells.

47. (Cancelled)

48. (Cancelled)

49. (Cancelled)

50. (Currently Amended) The method of claim 49, wherein said second control commands comprise control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics ~~comprise~~are selected from a group consisting of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

51. (Cancelled)

52. (Cancelled)

53. (Currently Amended) A ~~controllee~~ controllee electronic apparatus comprising:
first means to provide to a remote control, from the controllee electronic apparatus, with a first collection of user interface displays having associated control commands, for controlling the controllee electronic apparatus, and to receive into the controllee apparatus, first control commands, from said remote control, the first control commands being resulte~~d~~ding from said ~~provided~~ first collection of user interface displays being used by a user of said remote control; and
second means to control operation of said controllee electronic apparatus in accordance with said received first control commands.

54. (Cancelled)

55. (Cancelled)

56. (Currently Amended) The apparatus of claim 53, wherein the apparatus further comprises a connection interface adapted to provide a connection selected from a group consisting of a wireless optical connection operated in accordance with a wireless optical communication protocol, a wireless electro-magnetic connection operated in accordance with a wireless communication protocol, and a wired electrical connection operated in accordance with a wired communication protocol, and said first means is adapted to provides to the remote control, from the controllee electronic apparatus, with the first collection of user interface displays through the connection ~~a selected from the group~~ ~~one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.~~

57. (Currently Amended) The apparatus of claim 56, wherein the apparatus further comprises a connection interface adapted to provide an infrared based optical connection, operated in accordance with an IrDA standard based wireless optical communication protocol, and said first means is adapted to provides to the remote control, from the controllee electronic apparatus, ~~with the first collection of user interface displays through an the infrared based optical connection, using an IrDA standard based wireless optical communication protocol.~~

58. (Currently Amended) The apparatus of claim 56, wherein the apparatus further comprises a connection interface adapted to provide a wireless electro-magnetic communication connection, operated in accordance with a selected one of a Bluetooth and an IEEE 802.11 standard based wireless communication protocol, and said first means is adapted to provides to the remote control, from the controllee electronic apparatus, ~~with the first collection of user interface displays through thea wireless eletro-magnetic electro-magnetic communication connection, using a selected one of a Bluetooth and an IEEE 802.11 standard based wireless communication protocol.~~

59. (Currently Amended) The apparatus of claim 56, wherein the apparatus further comprises a connection interface adapted to provide a wired electrical connection selected from a group consisting of a serial connection, a parallel connection, a USB connection, and a IEEE 1394 based connection, operated using a message based communication protocol, and said first means is adapted to provides to the remote control, from the controllee electronic apparatus, ~~with the first collection of user interface displays through thea wired electrical connection that is a selected one of a serial connection, a parallel connection, a USB connection, and a IEEE 1394 based connection, using a message based communication protocol.~~

60. (Cancelled)

61. (Cancelled)

62. (Currently Amended) The apparatus of claim 53, wherein said first means is further adapted to provide to said remote control, from the controllee electronic apparatus, with a second collection of user interface displays having associated commands, for controlling an auxiliary controllee electronic device coupled to said controllee electronic apparatus.

63. (Cancelled)

64. (Cancelled)

65. (Cancelled)

66. (Currently Amended) The apparatus of claim 62, further comprising
third means to receive into the controllee electronic apparatus, from said auxiliary controllee electronic device, specifications of the substantive contents of said second collection of user interface displays; and

fourth means to generate within the controllee electronic apparatus, said second collection of user interface displays in accordance with said received specifications.

67. (Cancelled)

68. (Currently Amended) The apparatus of claim 66, wherein the apparatus further comprises a connection interface adapted to provide a connection selected from a group consisting of a wireless optical connection operated in accordance with a wireless optical communication protocol, a wireless electro-magnetic connection operated in accordance with a wireless communication protocol, and a wired electrical connection operated in accordance with a wired communication protocol, and said third means is adapted to receive the specifications, into the controllee electronic apparatus, from the auxiliary controllee electronic device, through the connection. ~~a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless electro-magnetic connection in accordance with a wireless~~

~~communication protocol, and a wired electrical connection in accordance with a wired communication protocol.~~

69. (Currently Amended) The apparatus of claim 68, wherein the apparatus further comprises a connection interface adapted to provide a video connection, operated in accordance with a message based communication protocol embedded within a video protocol, and said third means is adapted to receives the specifications, into the controllee electronic apparatus, from the auxiliary controllee electronic device, through ~~athe video connection, using a message based communication protocol embedded within a video protocol.~~

70. (Currently Amended) The apparatus of claim 62, wherein
said first means is further adapted to receives second control commands, into the controllee electronic apparatus, from said remote control, the second control commands being resulteding from said provided second collection of user interface displays being used by said user of said remote control; and

said second and third means are further adapted to cooperate to control operation of said auxiliary controllee electronic device in accordance with said received second control commands.

71. (Cancelled)

72. (Currently Amended) The apparatus of claim 70, wherein said second and third means are adapted to cooperate to relay from the controllee electronic apparatus, the received second commands, to the auxiliary controllee electronic device.

73. (Cancelled)

74. (Currently Amended) The apparatus of claim 62, wherein said auxiliary controllee electronic device is a device selected from a group consisting of a

videocassette recorder (VCR), a digital versatile disk (DVD) player, a home theatre audio control unit, and a video camera.

75. (Cancelled)

76. (Original) The apparatus of claim 53, wherein said controllee electronic apparatus is a TV.

77. (Currently Amended) The apparatus of claim 53, wherein said controllee electronic apparatus is a device selected from a group consisting of a set top box, a DVD player, a VCR.

78. (Currently Amended) An auxiliary controllee electronic apparatus comprising:
first means adapted to provide from the auxiliary controllee electronic apparatus, specifications for a collection of user interface displays having associated control commands, for controlling the auxiliary controllee electronic device, to a primary controllee electronic device, for the primary controllee electronic device to generate and provide to a remote control, the collection of user interface displays, ~~to a remote control~~ , from the primary controllee electronic device;

second means adapted to receive control commands originated from said remote control, into the auxiliary controllee electronic apparatus, the control commands being ~~resulting~~ from said provided collection of user interface displays being used by a user of said remote control; and

third means adapted to control operation of said auxiliary controllee electronic device in accordance with said received control commands.

79. (Cancelled)

80. (Cancelled)

81. (Cancelled)

82. (Currently Amended) The apparatus of claim 78, wherein the apparatus further comprises a connection interface adapted to provide a connection selected from a group consisting of a wireless optical connection operated in accordance with a wireless optical communication protocol, a wireless electro-magnetic connection operated in accordance with a wireless communication protocol, and a wired electrical connection operated in accordance with a wired communication protocol, and said first means is adapted to provides from the auxiliary controllee electronic apparatus, the specifications of its collection of user interface displays, to the primary controllee electronic device, through the connection. ~~a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.~~

83. (Currently Amended) The apparatus of claim 78, wherein the apparatus further comprises a connection interface adapted to provide a video connection, operated in accordance with a message based communication protocol embedded within a video protocol, and said first means is adapted to provides from the auxiliary controllee electronic apparatus, the specifications for its collection of user interface displays, to the primary controllee electronic device, through thea video connection, ~~using a message based communication protocol embedded within a video protocol.~~

84. (Currently Amended) The apparatus of claim 78, wherein said second means is adapted to receives into the auxiliary controllee electronic apparatus, the control commands, directly from the remote control ~~through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.~~

85. (Currently Amended) The apparatus of claim 78, wherein said second means is adapted to receives into the auxiliary controllee electronic apparatus, the control

commands, indirectly via said primary controllee electronic device ~~through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.~~

86. (Currently Amended) The apparatus of claim 78, wherein said auxiliary controllee electronic apparatus is an apparatus selected from a group consisting of a videocassette recorder (VCR), a digital versatile disk (DVD) player, a home theatre audio control unit, and a video camera.

87. (Cancelled)

88. (Original) The apparatus of claim 78, wherein said primary controllee electronic device is a TV.

89 (Currently Amended) The apparatus of claim 78, wherein said primary controllee electronic device is a device selected from a group consisting ~~one~~ of a set top box, a DVD player and VCR player.

90. (Currently Amended) A field extendable remote control apparatus comprising:
first means adapted to receive into the field extendable remote control apparatus, from a primary controllee electronic device, a first collection of user interface displays having associated control commands, for controlling thea primary controllee electronic device;

second means adapted to facilitate usage of the first collection of user interface displays by a user to control the primary controllee electronic device; and

third means adapted to provide first control commands from the field extendible remote control apparatus, to the primary controllee electronic device, to control the primary controllee electronic device, in response to said usage of the first collection of user interface displays.

91. (Cancelled)

92. (Cancelled)

93. (Currently Amended) The apparatus of claim 90, wherein the apparatus further comprises a connection interface adapted to provide a connection selection from a group consisting of a wireless optical connection operated in accordance with a wireless optical communication protocol, a wireless electro-magnetic connection operated in accordance with a wireless communication protocol, and a wired electrical connection operated in accordance with a wired communication protocol, and said first means is adapted to receives into the apparatus, the first collection of user interface displays, from the primary controllee electronic device, through the connection. ~~a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.~~

94. (Cancelled)

95. (Cancelled)

96. (Currently Amended) The apparatus of claim 90, wherein
said first means is further adapted to receives into the field extendible remote control apparatus, a second collection of user interface displays having associated control commands, from the primary controllee electronic device, for controlling an auxiliary controllee electronic device coupled to the primary controllee electronic device;
said second means is further adapted to facilitates usage of the second collection of user interface displays by a user to remotely control the auxiliary controllee electronic device; and

said third means is further adapted to provides from the field extendible remote control apparatus, second control commands, either directly or indirectly to the auxiliary controllee electronic device, to control the auxiliary controllee electronic device, in response to said usage of the second collection of user interface displays.

97. (Cancelled)

98. (Cancelled)

99. (Currently Amended) The apparatus of claim 96, wherein the apparatus further comprises a connection interface adapted to provide a connection selection from a group consisting of a wireless optical connection operated in accordance with a wireless optical communication protocol, a wireless electro-magnetic connection operated in accordance with a wireless communication protocol, and a wired electrical connection operated in accordance with a wired communication protocol, and said first means is adapted to receives into said field extendible remote control apparatus, said second collection of user interface displays, from the primary controllee electronic device, through the connection. ~~a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.~~

100. (Cancelled)

101. (Cancelled)

102. (Cancelled)

103. (Cancelled)

104. (Cancelled)